Abstract:

An apparatus generates sine waves of electromotive force (i.e. alternating current) from a battery. The battery includes a given number of cells connected in series. A stator and commutator is formed by a multiple of segments. Each of the segments is connected in sequence to a respective cell of the battery. The apparatus can be incorporated in a rotary switching device that further includes a rotor having at least one brush contacting the segments of the stator and commutator to carry a step waveform approximating a sine wave. The rotary switch can be included in various setups to provide a backup or alternate generator that provides alternating current.